

## **IN THE CLAIMS:**

### **Amendments to the Claims**

Please cancel claims 1 and 5 without prejudice or disclaimer of the subject matter thereof, please rewrite claims 2 and 4 in independent form, please amend claim 3, and please cancel claims 6 and 7, which stand withdrawn from consideration as being directed to a non-elected invention, without prejudice or disclaimer thereof and without prejudice to the right to file a divisional application directed thereto as shown below.

### **Listing of Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (canceled)

2. (original) The magneto-resistive head ~~as claimed in Claim 1,~~  
comprising:
- a first and second magnetic shield films;
  - a spin bulb film formed between the first and the second shield films via an insulation film;
  - a soft-magnetic film arranged to be in contact with both end portions of a free layer of the spin bulb film;
  - a permanent magnet film arranged so as to be in contact with the lower portion of the soft-magnetic film and not in contact with the free layer of the spin bulb film; and
  - an electrode film for applying a signal detection current to the spin bulb film;

wherein a distance between the end portion of the free layer of the spin bulb film and the end portion of the permanent magnet is not greater than 1.5 multiplied by a smaller distance among the distance between the permanent magnet film end portion and the first magnetic shield film and the distance between the permanent magnet film end portion and the second magnetic shield film.

3. (currently amended) The magneto-resistive head as claimed in Claim 4~~2~~, wherein the soft-magnetic film has a saturation magnetic flux density not smaller than 0.8 multiplied by a saturation magnetic flux density of the free layer of the spin bulb film.

4. (currently amended) The magneto-resistive head ~~as claimed in Claim 4~~, comprising:

a first and second magnetic shield films;

a spin bulb film formed between the first and the second shield films via an insulation film;

a soft-magnetic film arranged to be in contact with both end portions of a free layer of the spin bulb film;

a permanent magnet film arranged so as to be in contact with the lower portion of the soft-magnetic film and not in contact with the free layer of the spin bulb film; and

an electrode film for applying a signal detection current to the spin bulb film;

wherein a product of the saturation magnetic flux density of the soft-magnetic film multiplied by the film thickness is 1 to 10 multiplied by the product of the saturation magnetic flux density of the free layer of the spin bulb film multiplied by the film thickness.

Claims 5-7 (canceled)